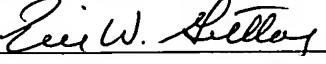


Attorney Docket No.: 130706



I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on April 12, 2004   
Eric W. Guttag

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of

Irene SPITSBERG et al

Serial No. 10/748,521

Filed: December 30, 2003

For: THERMAL BARRIER COATINGS WITH PROTECTIVE OUTER LAYER FOR IMPROVED IMPACT AND EROSION RESISTANCE

**INFORMATION DISCLOSURE STATEMENT PURSUANT TO 37 CFR 1.56, 1.97 and 1.98  
(WITHIN 3 MONTHS OF FILING OR PRIOR TO FIRST OFFICE ACTION)**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

In accordance with 37 CFR 1.56, 1.97 and 1.98, Applicants request the Examiner to make of record the documents listed on the attached PTO-1449 forms. Copies of the listed documents that are not U.S. patent documents are also enclosed. In accordance with MPEP 609, the Examiner is requested to initial each document listed on the attached PTO-1449 forms in the space provided, make a copy of the initialed form, and return the copy to Applicants' attorney.

Applicants also request the Examiner to consider and make of record certain copending U.S. application(s) that are listed in the attached Table entitled "Copending U. S. Patent Applications." Copies of the copending application(s) listed in the attached Table are also enclosed. In accordance with MPEP 609, the Examiner is requested to initial each copending application listed on the attached Table in the space provided, make a copy of the initialed Table, and return the copy to Applicants' attorney.

This paper and the enclosed documents are being submitted in accordance with 37 CFR 1.97(b), i.e., within three (3) months of the application filing date or prior to a first Office Action on the merits.

Respectfully submitted,

For: Irene SPITSBERG et al

By   
Eric W. Guttag  
Attorney for Applicants  
Registration No. 28,853  
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Customer No. 31838

April 12, 2004



# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

*Complete if Known*

|                      |                   |    |   |                        |        |
|----------------------|-------------------|----|---|------------------------|--------|
| Application Number   | 10/748,521        |    |   |                        |        |
| Filing Date          | December 30, 2003 |    |   |                        |        |
| First Named Inventor | Irene Spitsberg   |    |   |                        |        |
| Art Unit             |                   |    |   |                        |        |
| Examiner Name        |                   |    |   |                        |        |
| Sheet                | 1                 | of | 1 | Attorney Docket Number | 130706 |

## U. S. PATENT DOCUMENTS

| Exam.<br>Initials* | Cite<br>No. <sup>1</sup> | Document Number                            | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |
|--------------------|--------------------------|--------------------------------------------|--------------------------------|----------------------------------------------------|---------------------------------------------------------------------------------|
|                    |                          | Number - Kind Code <sup>2</sup> (if known) |                                |                                                    |                                                                                 |
|                    |                          | US- 4,861,618                              | 08/29/1989                     | Vine et al.                                        |                                                                                 |
|                    |                          | US- 5,350,599                              | 09/27/1994                     | Rigney et al.                                      |                                                                                 |
|                    |                          | US- 5,384,200                              | 01/24/1995                     | Giles et al.                                       |                                                                                 |
|                    |                          | US- 5,705,231                              | 01/06/1998                     | Nissley et al.                                     |                                                                                 |
|                    |                          | US- 5,942,334                              | 08/24/1999                     | Wortman                                            |                                                                                 |
|                    |                          | US- 5,981,088                              | 11/09/1999                     | Bruce et al.                                       |                                                                                 |
|                    |                          | US- 6,025,078                              | 02/15/2000                     | Rickerby et al.                                    |                                                                                 |
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|                    |                          | US- 6,183,884                              | 02/06/2001                     | Rickerby                                           |                                                                                 |
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|                    |                          | US- 6,319,614 B1                           | 11/20/01                       | Beele                                              |                                                                                 |
|                    |                          | US- 6,333,118 B1                           | 12/21/2001                     | Alperine et al.                                    |                                                                                 |
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|                    |                          | US- 2003/0224200 A1                        | 12/04/2003                     | Bruce                                              |                                                                                 |
|                    |                          |                                            |                                |                                                    |                                                                                 |

## OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

|                    |                          |                                                                                                                                                                                                                                                                |                |
|--------------------|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| Exam.<br>Initials* | Cite<br>No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s) volume-issue number(s), publisher, city and/or country where published. | T <sup>2</sup> |
|                    |                          | HWANG et al., "Grain Size Control of Tetragonal Zirconia Polycrystals Using the Space Charge Concept", J. Am. Ceram. Soc., 1990, 73(11):3269-77                                                                                                                |                |
|                    |                          | KIM, "Effect of Ta <sub>2</sub> O <sub>5</sub> , Nb <sub>2</sub> O <sub>5</sub> , and HfO <sub>2</sub> Alloying on the Transformability of Y <sub>2</sub> O <sub>3</sub> -Stabilized Tetragonal ZrO <sub>2</sub> ", J. Am. Ceram. Soc., 73(1):115-120          |                |
|                    |                          | NAKAYAMA et al., "Effect of La <sub>2</sub> O <sub>3</sub> Addition on Thermal Stability of Y-TZP," J. Mat. Sci. Lett., 18:1339-41 (1999)                                                                                                                      |                |
|                    |                          | VASSEN et al., "Zirconates as New Materials for Thermal Barrier Coatings," J. Am. Ceram. Soc., 83(8):2023-28 (2000)                                                                                                                                            |                |

|                       |  |                    |  |
|-----------------------|--|--------------------|--|
| Examiner<br>Signature |  | Date<br>Considered |  |
|-----------------------|--|--------------------|--|

COPENDING U. S. PATENT APPLICATIONS

| Examiner Initial | Applicant(s)     | Serial No. | Filing Date | Attorney Docket No. |
|------------------|------------------|------------|-------------|---------------------|
|                  | Gorman et al     | 10/748,516 | 12/30/03    | 127051              |
|                  | Boutwell et al   | 10/748,517 | 12/30/03    | 127084              |
|                  | Darolia et al.   | 10/748,519 | 12/30/03    | 128895              |
|                  | Spitsberg et al. | 10/748,508 | 12/30/03    | 129967              |
|                  | Spitsberg et al  | 10/748,520 | 12/30/03    | 129968              |
|                  | Spitsberg et al  | 10/748,518 | 12/30/03    | 130707              |
|                  | Spitsberg et al  | 10/748,513 | 12/30/03    | 143385              |